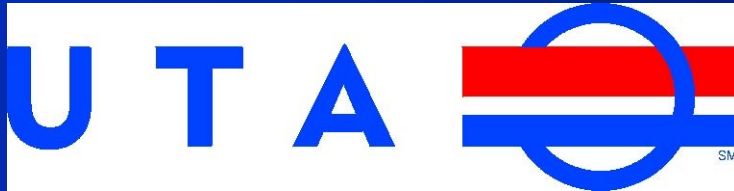


West Salt Lake Transit Study

Christopher Chesnut
Manager – Strategic Planning
Utah Transit Authority
cchesnut@rideuta.com

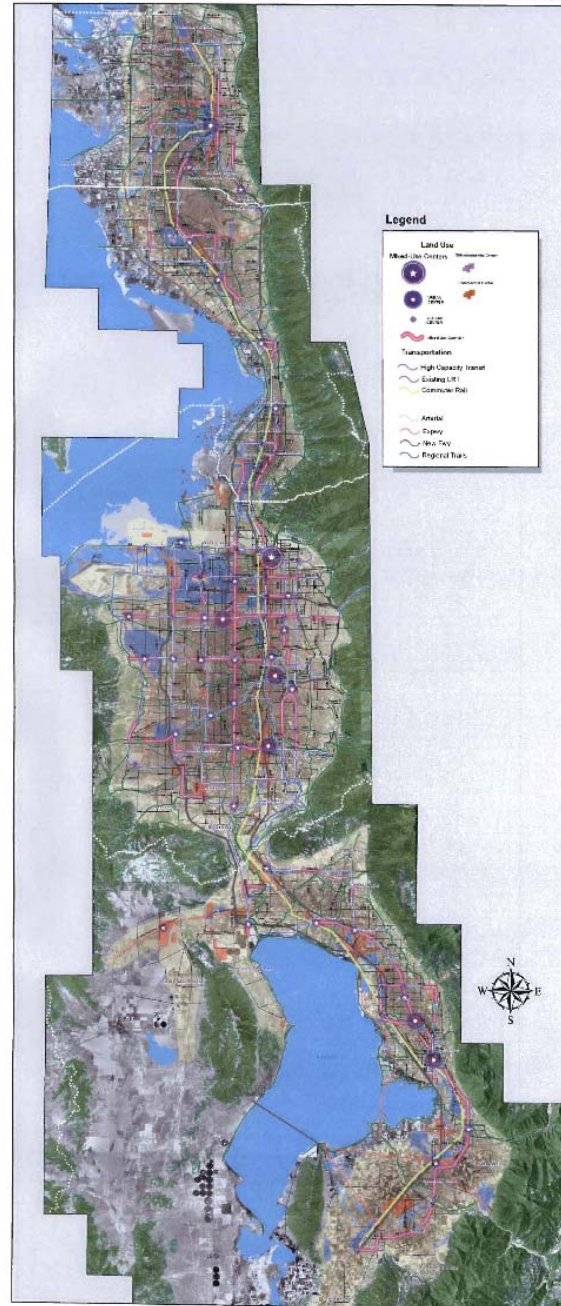
Study Partners



What If?

- Owning more than one car was not necessary
 - What would/could be done with the \$8,100 annual savings?
 - Vacation(home/trip)
 - Community Service(Mission/charity)
 - Education(Personal or for a child)
 - Housing(Different neighborhood)
 - Saving
 - Retire earlier

Vision Scenario



PRESENTATION FOR:

West Salt Lake County Transit Study



Study Area

- East – Bangerter Highway
- North, West and South – Salt Lake County Line



What the study is not

- Ending the use of auto – travel
- A look at the roadway needs

Study Purpose

- Develop a public transportation plan for western Salt Lake County
- Establish the framework for a future transit system
- Develop a shared vision of transit corridors supporting a sustainable development program
- Plan will be basis for input into next update of the Regional Transportation Plan

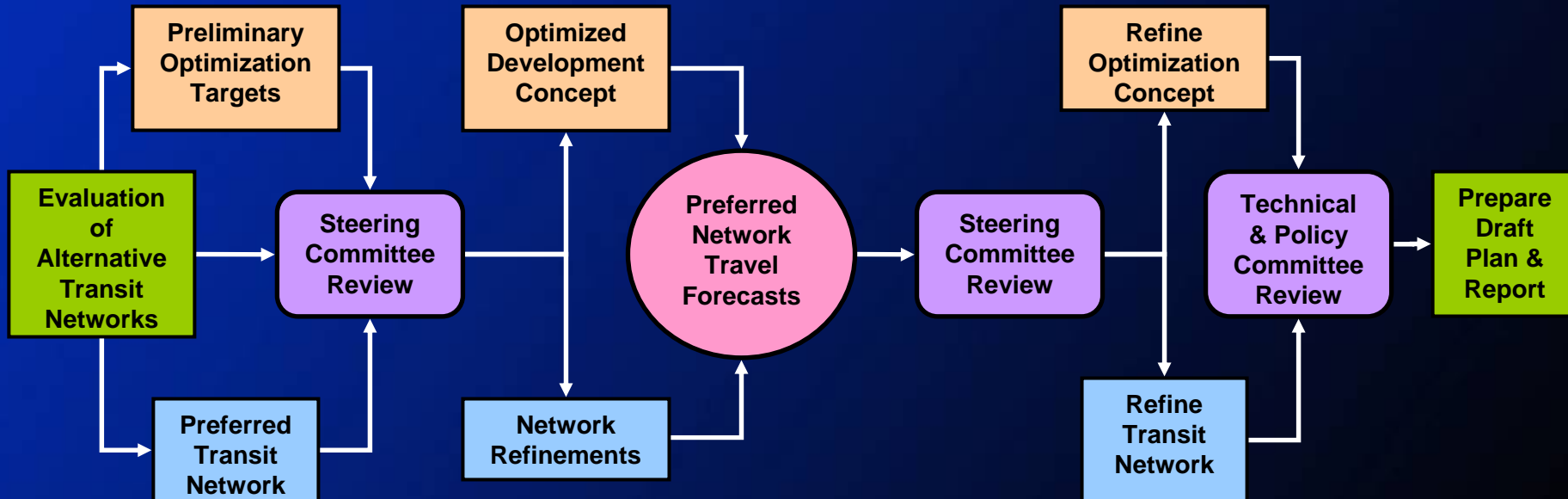


Study Process

- Develop Land Use/Demographic Forecasts
- Develop Transit Network Alternatives
- Run Travel Demand Models
- Evaluate Alternatives
- Develop Preferred Alternative
- Prepare Plan and Report

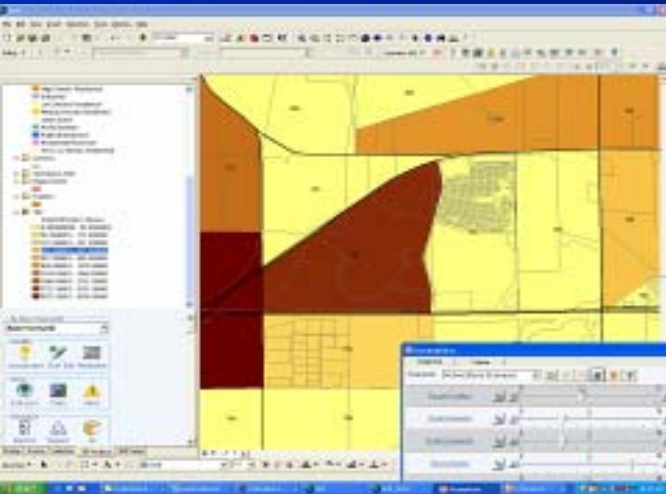


Study Process



Land Use Allocation Model

Land-use model translates land use to update and check TAZ projections



Land Use



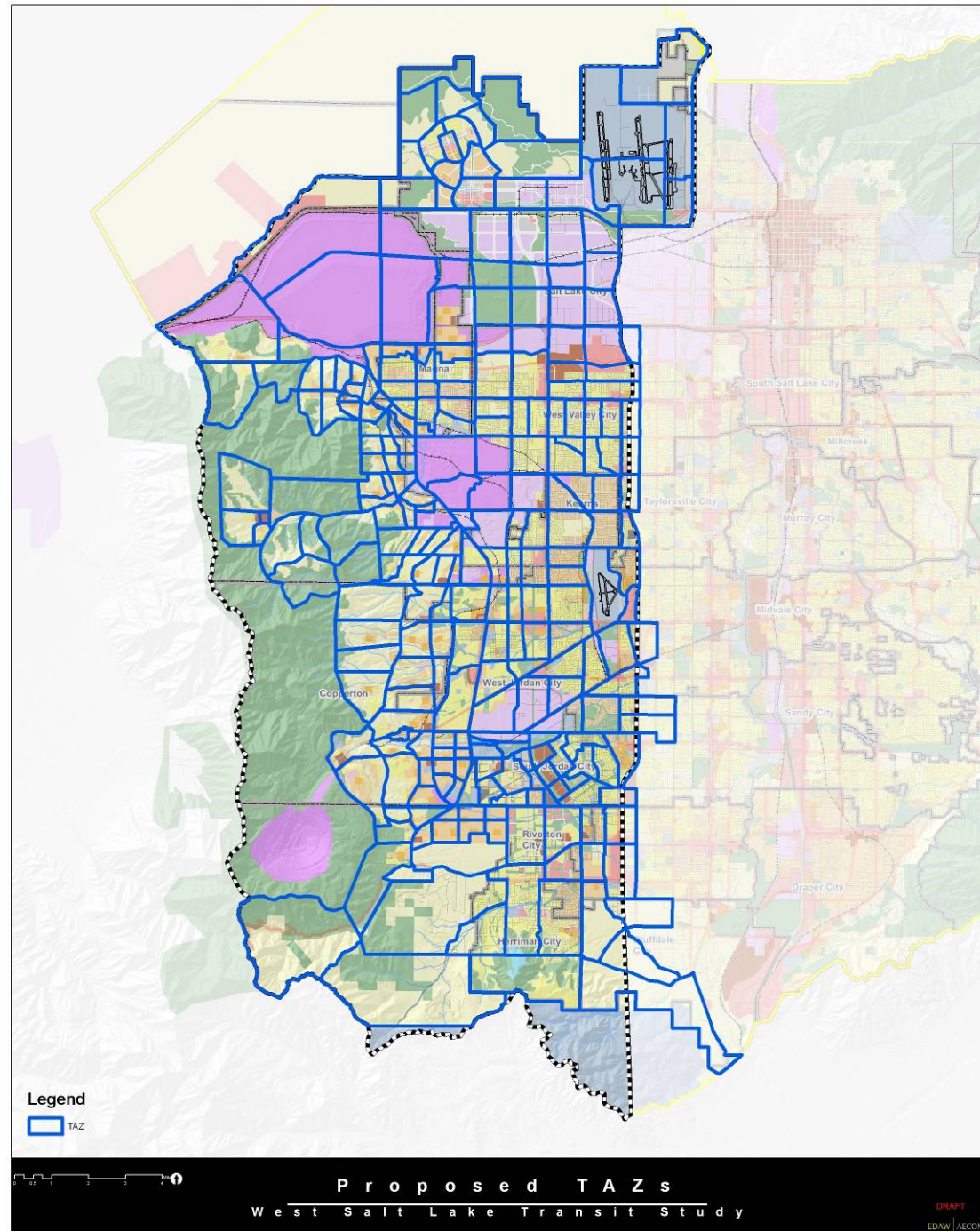
2040 TAZ Forecast



Build-out TAZ Forecast

Transportation Analysis Zones

New detailed
TAZ layer



Non-Buildable Land Factors

Parks (Municipalities, Federal, State, County)

Airport Zone A

Hydrology

Slope > 30%

Landfills

West Bench General Plan Constraints

Northwest Quadrant Master Plan Constraints

Wetlands

Tailings & Active Mining Areas

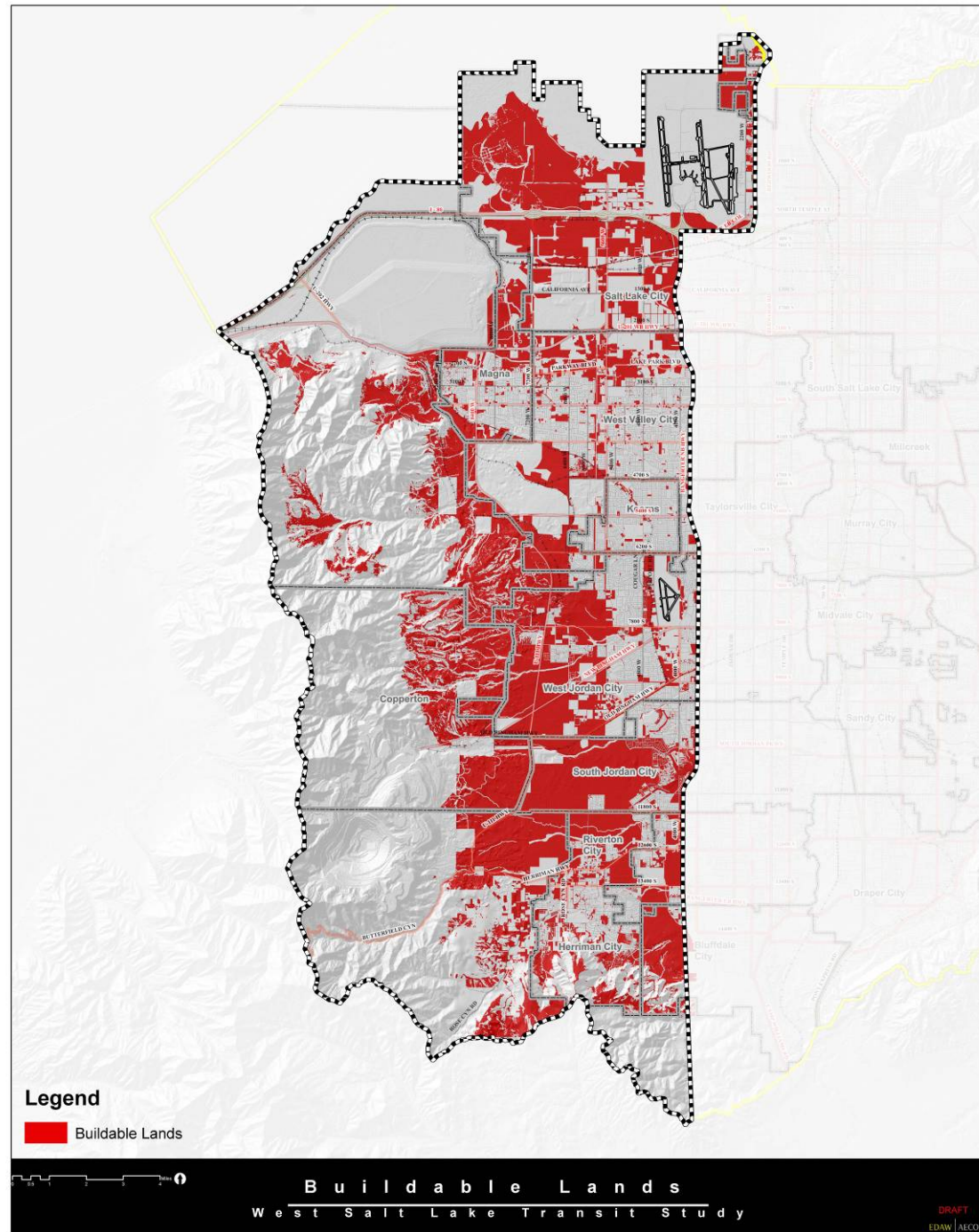
Elevation < 4217'

Floodplains

Lands with Existing Structures (Developed)

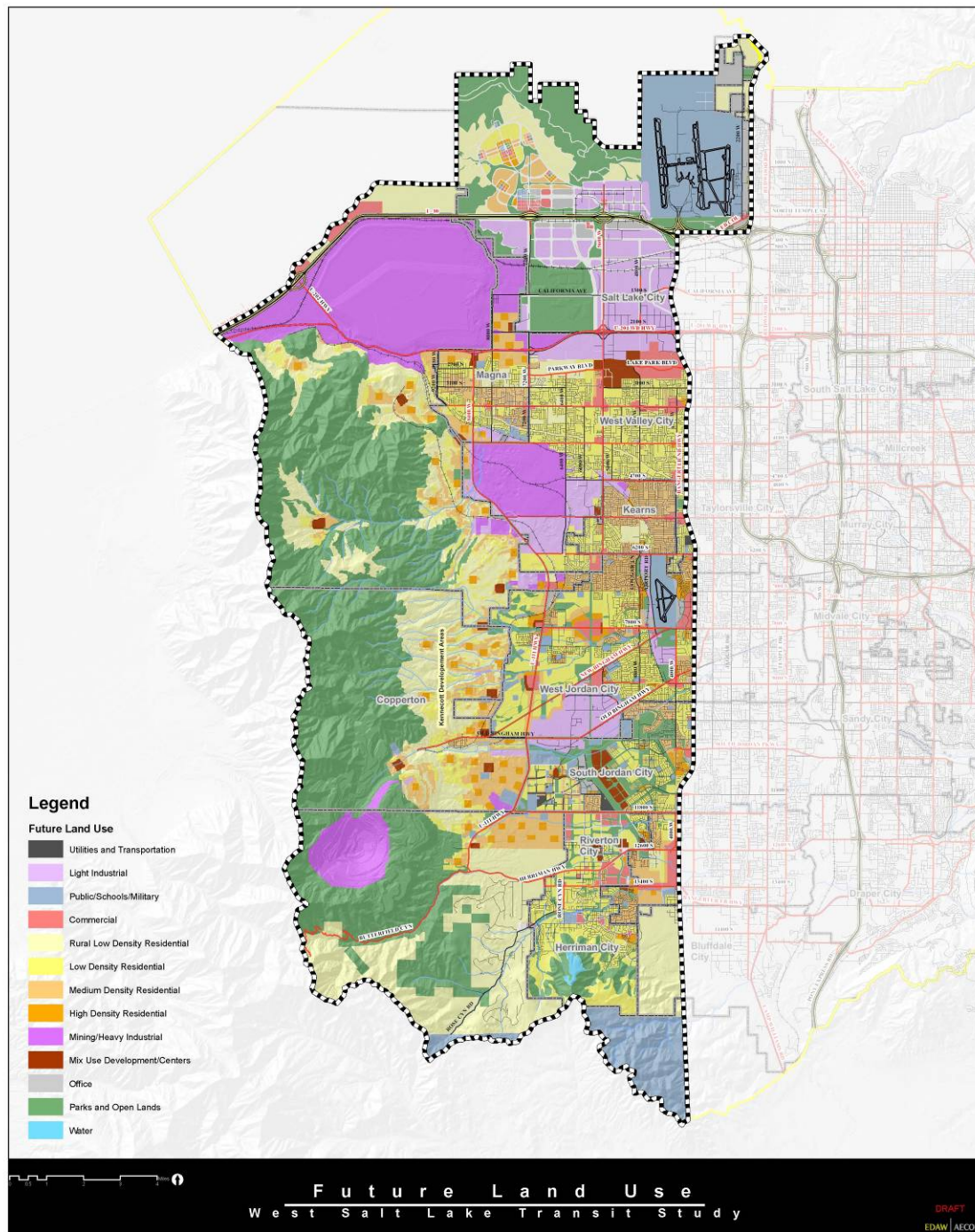
Military Lands

A buildable
lands layer for
planning and
forecasting
purposes.

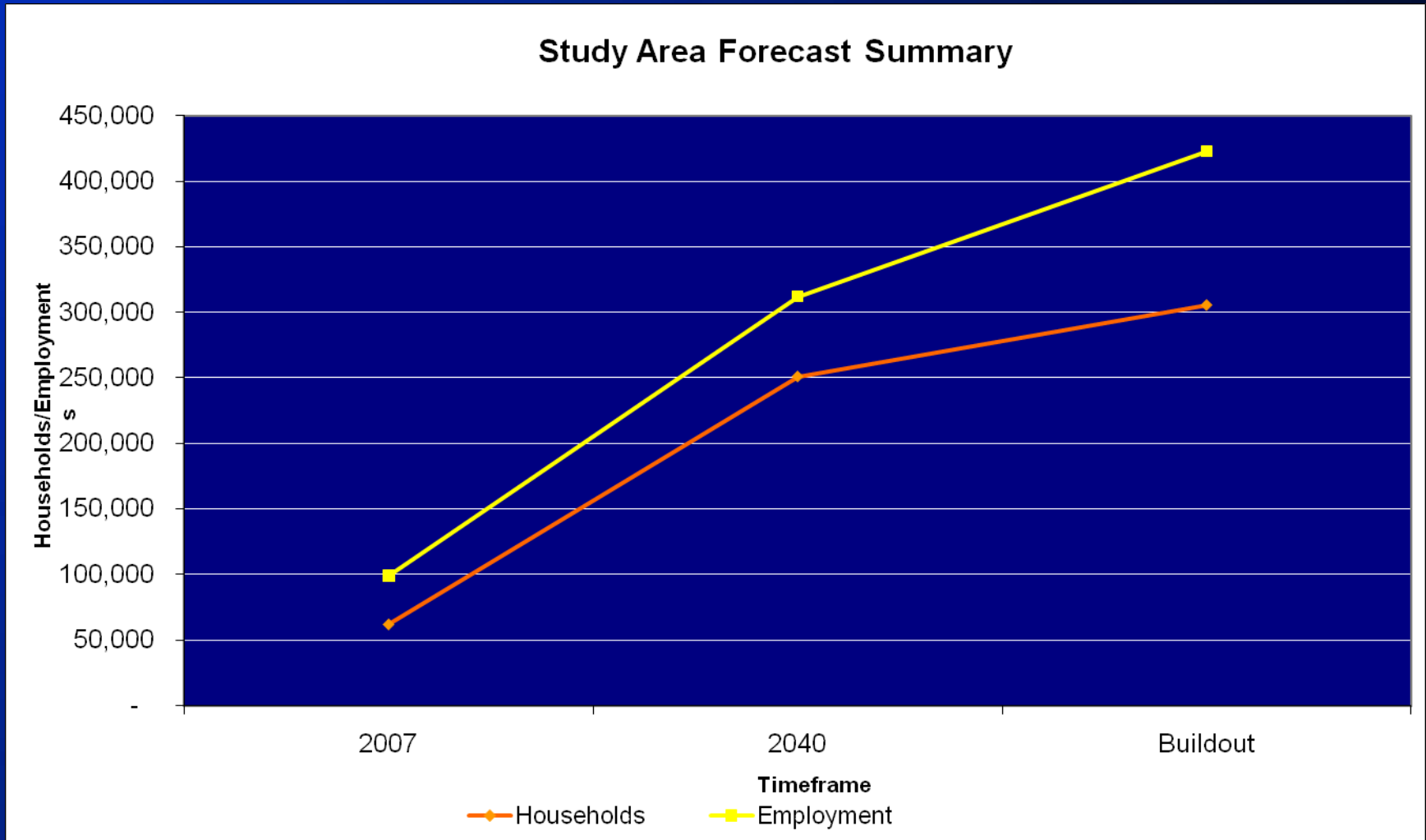


Seamless Land Use

New seamless
land use layer
for planning and
forecasting
purposes.



Population and Employment Forecast



Transit Characteristics & Performance

Why Understand Characteristics?

- Opportunity to consider broad variety of transit options (not usually possible)
- Transit choices can guide other decisions (e.g. corridor preservation)
- Help define performance and land use objectives (e.g. desired transit share of trips)

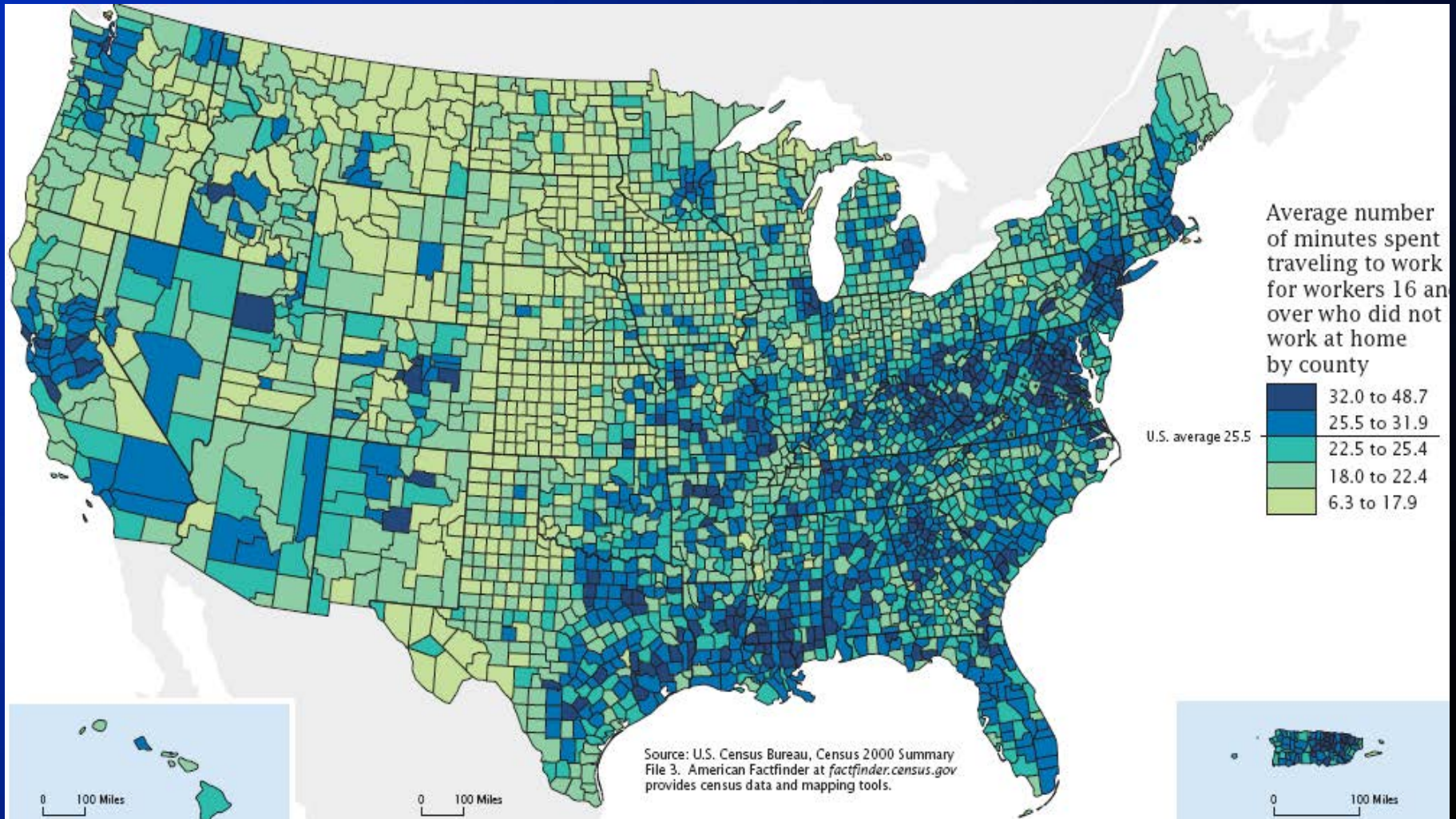
Transit Characteristics

- Physical characteristics
 - Vehicle / consist size & capacity
 - Guideway - width / exclusivity
 - Stations & Parking
 - Access requirements

Factors for Transit Success

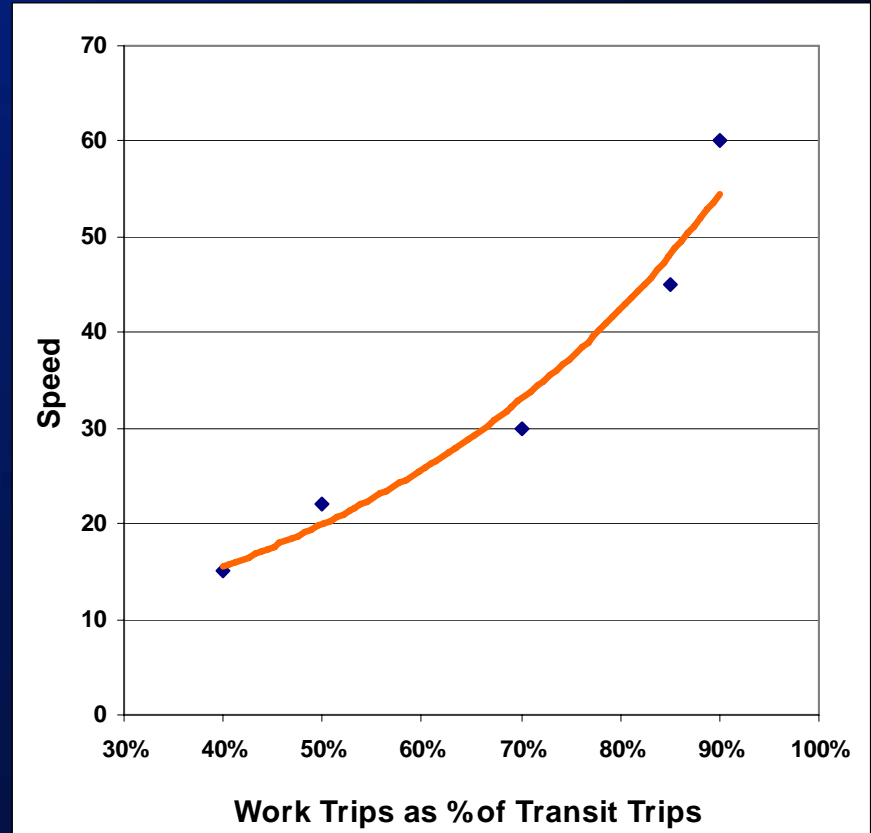
- Trip Length
- Travel time relative to auto travel
- Amount of transit service
- Other factors – parking, tolls, etc.

Travel Time



Typical Transit Trip

- Work trip is primary purpose and drives system design
- Commute trips increase with system speed
- Higher speed systems attract more choice riders



Family of Transit Services

- Low speed and capacity
- Medium speed and capacity
- High speed, medium capacity
- High speed and capacity

Low Speed & Capacity

- Examples
 - Local Bus
 - Rapid Bus
 - Streetcar



Medium Speed & Capacity

- Examples
 - Light Rail
 - Bus Rapid Transit
 - DMU (diesel multiple units)

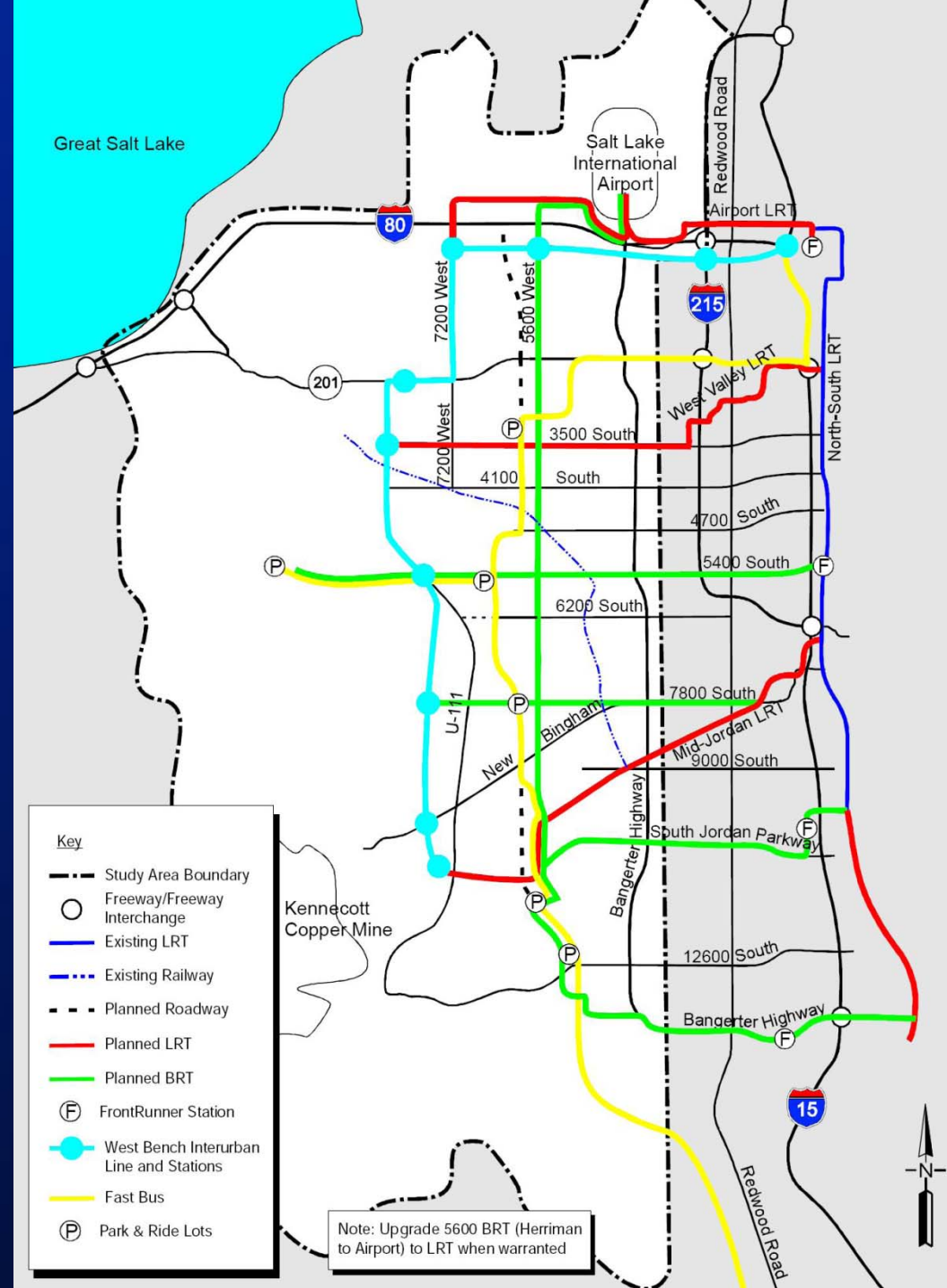


High Speed & Capacity

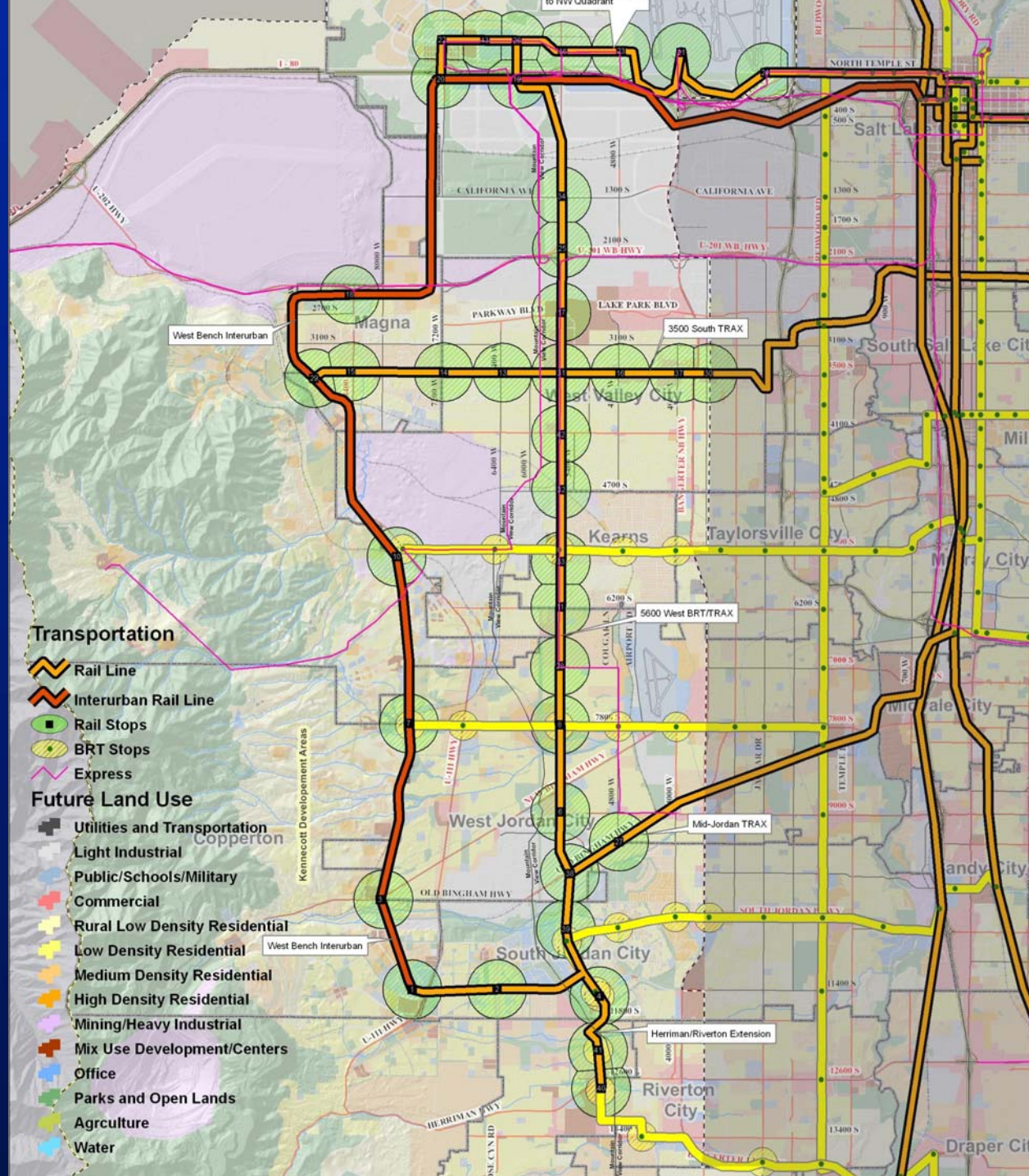
- Examples
 - TGV
 - Commuter Rail
 - DMU (diesel multiple units)



Recommended Transit Plan



DMJM HARRIS | AECOM



Results of Optimization

	Goal	Base Plan	Optimized Plan
Horizon Date		Build-out	Build-out
Home Based Transit Work Trips		40,400	51,700
Daily Transit Riders		103,044	129,970
Annual Revenue Service Hours		750,000	830,000
Transit Mode Share (area residents)	6%	8.3%	9.4%
Annual Revenue Hours per Capita	1.0	0.99	0.95
Annual Transit Riders per Capita	30.0	41.1	44.5
New Development Near Transit			
Households	35%	22%	36%
Employment	50%	32%	45%

Conclusions

- Small changes in land use can have a positive impact
- Plan for the right type of transit

Questions?

Christopher Chesnut
Manager – Strategic Planning
Utah Transit Authority
cchesnut@rideuta.com